



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

STATE *of the* WEATHER *in* DUBLIN *from the 1st*
of June 1791 to the 1st of January 1793. By RICHARD
KIRWAN, *Esq; F. R. S. and M. R I. A.*

THESE observations were made at my house in Cavendish-row; the barometer within doors suspended in a room where no fire is kept, about forty feet above high-water mark, and inspected daily about two o'clock.

THE thermometer, one of Six's construction, which marks the maximum and minimum of temperature in the twenty-four hours. It is suspended without doors in a northern exposition, about five feet and a half above ground.

THE rain gage receives the rain on a surface of one square foot; it is elevated about thirty feet above the surface of the earth, and at the distance of at least one hundred feet from any building.

building. The rain is collected and weighed two or three times a month. I began to use it on the 1st of July 1791.

IN my absence these instruments were daily observed and their indications noted by the Rev. Mr. Mc. Mahon, whose skill and diligence in matters of this nature are well known.

JUNE 1791.

BAROMETER.

THE *greatest* height of the barometer in this month happened on the 7th, and amounted to 30.4. Wind E. by S. Very warm and fair.

IT *stood lowest* on the 30th, being 29.55. Wind S. Windy with showers, but warm.

Its mean height during the month was 30.06.

THERMOMETER.

Greatest heat 74°.5, wind E. by S. on the 7th.

THE *least* 42°, wind W. N. W. cloudy and rainy on the 16th.

Mean of the month 58°.76.

In

In London, greatest height of the barometer 30.22 on the 7th. Least 29.39 on the 16th. Mean of the month 29.93.

Greatest heat 80° on the 7th. Least 47° on the 13th and 14th. Mean of the month 61°.3.

BUT it is to be noted that in the house of the Royal Society nocturnal observations are not taken, so that the greatest cold does not appear.

JULY 1791.

BAROMETER.

*Greatest height 30.32 on the 15th. Fair. Wind E. N. E.
Least 29.45 on the 4th. Rainy. High wind W.
Mean 29.929.*

THERMOMETER.

*Greatest heat 71°.5 on the 2d. Wind S. by W.
Least 49° on the 18th. Rainy. Wind S. W.
Mean 61°.13.*

RAIN.

It rained twenty-two days, more or less; the quantity that month amounted to 2.469 inches; hence it was a *wet* month.

In London the greatest height of the barometer was 30.24 on the 15th; the *least* 29.24 on the 11th. Mean of the month 29.89.

GREATEST heat $78^{\circ}.5$ on the 18th; least 52° on the 7th; mean $62^{\circ}.6$.

THERE were twelve rainy days, and the mean quantity was 2.194 inches; but the observer remarks that the quantity of rain noted was through some defect in the instrument or its position this year remarkably deficient.

AUGUST 1791.

BAROMETER.

Greatest height 30.68 on the 19th. Wind W. by S. Fair.

Least 29.64 on the 31st. Wind E. N. E. Heavy rain, and high wind.

Mean of the month 30.172.

THERMOMETER.

Greatest heat $75^{\circ}.5$ on the 6th. Wind W. by S. Fair.

Least 48° on the 19th. Wind S. W. Fair.

Mean of the month $62^{\circ}.82$.

RAIN.

R A I N.

It rained seventeen days, more or less; the quantity was 2.876 inches; hence it was a wet month.

In London the *greatest* height of the barometer was 30.52 on the 20th; the *least* 29.65 on the 28th. The *mean* 30.06.

THE *greatest heat* 78°.5 on the 6th; *least* 50° on the 30th. *Mean* 64.9.

THE rain uncertain.

S E P T E M B E R 1791.

B A R O M E T E R.

Greatest height 30.51 on the 14th and 15th.

Least 29.6 on the 3d.

Mean 30.239.

T H E R M O M E T E R.

Greatest heat 72°.5 on the 16th.

Least 46°.5 on the 19th.

Mean 59°.35.

R A I N.

THERE were but eight rainy days in this month, and there fell only 1.2611 inches, so that it may be accounted *variable*.

In London the greatest height of the barometer was 30.33 on the 16th; the least 29.52 on the 4th. Mean of the month 30.09.

Greatest heat 77° on the 11th; least 43° on the 20th. Mean 59.5.

O C T O B E R 1791.

B A R O M E T E R.

Greatest height 30.55 on the 28th.

Least 28.64 on the 20th.

Mean 29.76.

T H E R M O M E T E R.

Greatest heat 66°.5 on the 3d.

Least 38° on the 23d.

Mean 51°.

R A I N.

THERE were fifteen rainy days; the quantity amounted to 2.522 inches, hence this month may be deemed *wet*.

In London, greatest barometrical height 30.46 on the 28th and 29th; least 28.89 on the 21st. Mean 29.69.

Greatest heat 62°.5 on the 5th; least 34° on the 24th. Mean 48°.9.

RAIN 2,+ inches.

NOVEMBER.

NOVEMBER.

BAROMETER.

Greatest height 30.34 on the 26th.

Least 28.96 on the 18th.

Mean 29.74.

THERMOMETER.

Greatest height 57°.5 on the 30th.

Least 31° on the 17th and 18th.

Mean 43°.

RAIN.

It rained twenty-two days in more or less quantity; the amount was 2.1088 inches, consequently the month may be called *wet*.

In London the greatest barometrical height was 30.28 on the 27th; the *least* 28.76 on the 19th; the *mean* 29.68.

Greatest heat 52°.5 on the 24th; *least* 25° on the 7th. *Mean* 43.6.

RAIN, uncertain, 2.5†.

DECEMBER.

D E C E M B E R.

B A R O M E T E R.

Greatest height 30.36 on the 20th.

Least 29.13 on the 13th.

Mean 29.723.

T H E R M O M E T E R.

Greatest heat 48°.5 on the 27th.

Least 25°. on the 16th.

Mean 36°.34.

R A I N.

IT rained thirteen days and snowed five during this month ; both amounted to 1.891 inches.

IN *London* the *greatest height* of the barometer was 30.38 on the 17th ; the *least* 28.9 on the 4th ; the *mean* 29.64.

THE *greatest heat* 48° on the 23d ; the *least* 21° on the 12th ; the *mean* 36°.7.

RAIN 1.12+.

Thus far I have given a comparative view of the state of the atmosphere in Dublin and London, from which many important consequences may be deduced relatively to the progress
and

and regrefs of the accumulations of the atmosphere, as well as heat and cold, but which I must leave to those who professedly pursue such inquiries.

A Synoptical View of the State of the Weather in 1792 in Dublin.

	BAROMETER.			THERMOMETER.			RAIN.	
	Higheft.	Lowest	Mean.	Higheft.	Lowest	Mean.	Days.	Inches.
January - -	30.57	28.76	29.721	53	19.5	39.92	21	2.679
February -	30.65	29.42	30.019	58.5	25.5	43.78	19	2.8240
March - -	30.47	29.18	29.707	60	26	44.09	25	2.3644
April - -	30.43	29.24	29.909	64	40.5	51.175	19	2.5616
May - -	30.57	29.12	30.061	67	29.5	52.193	17	1.8128
June - - -	30.55	29.59	30.093	74	43	56.975	16	0.8669
July - -	30.3	29.68	30.020	75.75	51	61.056	17	2.6141
August - -	30.43	29.4	30.043	77	52	62.584	15	5.8588
September -	30.69	29.26	29.915	67	42	54.788	25	3.0213
October - -	30.68	29.13	29.880	59	35	49.18	23	2.7980
November -	30.53	29.2	30.053	54	33	48	14	0.3940
December -	30.46	29.14	29.986	55	33	42.403	17	2.9163
Mean of the Year -			29.950	55.66		50.509	Total. 228	Total. 30.700

OBSER-

OBSERVATIONS.

I SHALL first compare the wetness of the seasons with the rules of probability above given.

1st, In the *Spring* months there fell 4.374 inches of rain, that is above two per month on an average, therefore this season was *wet*. Most rain fell in the first month.

2dly, The Spring being *wet*, the probability of a *wet* Summer was $\frac{5}{6}$ by the fifth rule; accordingly, except in June, it rained above two inches in each month, and upon an average above three. However it rained but forty-eight days instead of fifty-four.

3dly, The Summer being wet, the probability of wet, dry and variable Autumns were as 3, 5, and 12, by the eighth rule; however it turned out *wet*, which was the least probable event. It rained forty-eight days, and there fell above 5.8 inches.

AGAIN, after a *wet Spring* and *wet Summer* the probabilities of *wet*, *dry* and *variable* Autumns were 1, 2 and 2 respectively by the eleventh rule; by which it appears that the wetness of this Autumn was perfectly *extraordinary*, and not to be expected.

LASTLY, there were storms on the 19th and 20th of March from the South, therefore the probability of a *wet Summer* was 5 to 1 according to the fourth observation.

THE

THE most important changes that take place in the atmosphere seem to me to be those that happen five or six days before, or during, or five or six days after the vernal equinox, that is from the 16th to the 28th of March. In Dublin the natural height of the barometer is 30 inches, but in the above-mentioned period its mean height was 29.838, that is 0.162 parts of an inch too low; and the mean height of the whole month was 29.707, that is 0.293 parts of an inch too low, or below the standard height. Yet the wind was chiefly S. or S. W. which seems to denote an accumulation in that quarter; for otherwise why should it blow from a warmer to a colder region?

J A N U A R Y.

THE coldest days in January were the 11th, 12th, 13th and 14th; wind N. and N. E. except the 14th, when it was S. S. E.; yet the barometer was rather low, being between 29.28 and 29.42; on the 15th it was 28.76. This deserves attention.

F E B R U A R Y.

THE coldest days in February were the 17th, 18th and 19th; wind E. and N.; barometer in the mean time from 30.65 to 30.06.

AT Montmorenci, Pere La Cotte observed a much greater cold between the 16th and 24th; on the 8th a storm at W.

VOL. V.

G

With

With us it was equally on the night of the 7th at W.;
barometer 29.53.

M A R C H.

PERE LLA COTTE remarked that the mean height of the \bar{x} in this month was below its standard, which at Montmorency is 27 inches 10 lines and $\frac{1}{2}$, or 29.705 English.

J U L Y, A U G U S T and S E P T E M B E R.

THESE months were uncommonly wet in France, as with us.

I HAVE often remarked that the more it rains in May the less it rains in September. If it rains two inches in May there falls less than one in September. This I observed in England. But it is about four to three in any year that the fall of rain in September will be greater than in May.

DRA. HALES has shewn that on plains, and in the climate of London, twenty-two inches of rain are fully sufficient for all the purposes of vegetation, and forty-two in a hilly or mountainous country. 1 HALES, 56.